

Claim:

1. A module card ejecting mechanism comprising:

an ejecting plate coupled to a module card connector assembly and slidable along a card-moving direction of the module card connector assembly;

a push-push ejecting mechanism coupled to the module card connector assembly; said push-push ejecting mechanism comprising:

a housing having an inner wall defining a channel, said channel including a guiding section surrounding the inner wall, said guiding section having a push-out engagement part and a push-in engagement part which are cross-configured along an annular direction;

\*\*a pushing rod axially movable in the channel, said pushing rod including a free end and a pilot flange for slidable but non-rotatable engagement with the guiding section;

a rotator axially movable in the channel, said rotator being configured in a way that it is cyclically, alternatively engaged with the cross-configured push-out engagement part and push-in engagement part;

a spring elastically urging against the rotator;

wherein the ejecting plate is mechanically coupled to the pushing rod of the push-push ejecting mechanism such that a repeated pushing force exerted on the ejecting plate allows the rotator to alternatively slide to the push-out engagement part or the push-in engagement part under the guidance of the pilot flange of the pushing rod, thereby causing said rotator to rotate to a first rotating position or a second rotating position, to correspondingly move the pushing rod to a card-withdrawing position or a card-inserting position.

2. The module card ejecting mechanism according to Claim 1, wherein the push-out engagement part includes a plurality of annularly-disposed elongated slots.
3. The module card ejecting mechanism according to Claim 2, wherein each elongated slot is installed with a stopping wall.
4. The module card ejecting mechanism according to Claim 1, wherein the push-in engagement part is a plurality of annularly-disposed short slots.
5. The module card ejecting mechanism according to Claim 1, wherein an annularly-configured guiding means is provided between the cross-configured push-out engagement part and push-in engagement part.
6. The module card ejecting mechanism according to Claim 5, wherein the guiding means includes a plurality of guiding vanes configured along an annular direction.
7. The module card ejecting mechanism according to Claim 6, wherein each guiding vane is formed with an inclined guiding surface.
8. The module card ejecting mechanism according to Claim 2, wherein the rotator includes a plurality of annularly-disposed ribs.
9. The module card ejecting mechanism according to Claim 1, wherein the housing includes a stop shoulder.

10. The module card ejecting mechanism according to Claim 9, wherein the stop shoulder is shaped into a tapering wall and the free end of the pushing rod is shaped into a complementary widening rod fitted with the tapering wall.

11. The module card ejecting mechanism according to Claim 1, wherein the pilot flange includes a plurality of generally V-shaped, annularly-disposed guiding grooves and a plurality of annularly-disposed groove tops; wherein said guiding grooves and said groove tops are cross-arranged such that each of the latter ones is positioned between two of adjacent former ones.

12. The module card ejecting mechanism according to Claim 8, wherein the rotator includes a plurality of annularly-arranged oblique surfaces, such that when the rotator is located at the first rotating position or at the second rotating position, each oblique surface docks on one of said groove tops.

13. The module card ejecting mechanism according to Claim 1, wherein the push-out engagement part includes a plurality of annularly-disposed elongated slots, and wherein the rotator is formed with a plurality of ribs each of which is slidable in the elongated slots and formed with an oblique surface.

14. The module card ejecting mechanism according to Claim 1, wherein the end of the housing is sealed by a separate end cap.

15. A module card connector assembly, comprising:  
a card slot and a head end, wherein the head end is provided with one or a pair of  
module card ejecting mechanisms as illustrated in one of Claims 1 to 14.